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# THE AGING OF JAPAN: DEMOGRAPHIC PRESSURES ON THE PATRIARCHAL FAMILY

BY

Kimiko Tanaka

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#### **ABSTRACT**

# THE AGING OF JAPAN: DEMOGRAPHIC PRESSURES ON THE PATRIARCHAL FAMILY

By

#### Kimiko Tanaka

The population of Japan has been changing dramatically. The reason lies in shifts in fertility and mortality, which reflect the social, economic, and cultural changes since the Second World War. As a result, the Japanese have become one of the world's largest and fastest aging societies. I projected that its proportion of those aged 65 and older will reach 23 percent in 2010. The government is struggling with financing the care for the growing number of elderly. Elderly care is going to be the most difficult problem to tackle in Japan. One of the major problems is that females are taking on the heavy burden of care for the elderly as well as childcare, which intimidate single women with full-time work to marry. From my analysis, I propose some strategies to ease the burden of a middle aged woman in Japan in the face of very low fertility and its rapidly aging population.

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# **Introduction: The Aging Japanese Population**

"Japanese parents need children, not alone for emotional satisfaction, but because they have failed in life if they have not carried on the family line. Every Japanese man must have a son. He needs him to do daily homage to his memory after his death at the living-room shrine before the miniature gravestone. He needs him to perpetuate the family line down the generations and to preserve the family honor and possessions." (Benedict, 1946, p255)

More than 50 years have passed since Ruth Benedict wrote her famous text, *The Chrysanthemum and the Sword*. Many scholars since have studied the Japanese family and concluded that its uniqueness lies in its combination of patriarchal, patrilineal, primogenitural, and patrilocal tradition, which reflects the Confucian precept of filial piety (Benedict, 1946; Nakane, 1973; Martin, 1989; Hamabata, 1990; Smith, 2000). The Japanese family is quite different from that in Western countries, where parents do not expect to live with their children in old age and wish instead for their independence.

For 50 years after the Second World War, Japan went through dynamic economic, medical, and political changes, which have strongly shaped its demographic trends (Martin, 1989; Ishi, 1999; Ato, 1997). The trend of interest to this master's thesis is the explosive growth in the number of elderly Japanese (ages 65 and over). Today, Japan is tied with Greece and Italy in having the highest

percentage of elderly people (19 percent of the population of all three nations is aged 65 or more; Population Reference Bureau, 2003). This fact poses difficulties to the continuity of the patriarchal, primogenitural, and patrilocal organization of the Japanese family, especially because women are considered to be the main caregivers in Japanese society.

The purposes of this paper are to discuss the dramatic demographic changes since the Second World War in Japan, which are essential to understand the process of aging of Japanese society; then to discuss the problems of eldercare as negative outcomes of these changes as well as of the Japanese patriarchal family system and gender inequality; and finally to provide solutions to these problems. This paper is organized as follows. First, I shall describe the ways in which Japan's age structure became one of the oldest in the world during the latter half of the twentieth century. Second, I shall project the Japanese population from 2000 to 2010 to assess the continuity in the growth of the elderly population. Third, I shall analyze a national survey of elder Japanese people to illustrate the current patriarchal practices of eldercare, which produce a heavy burden on women as the caregivers. Fourth, I shall propose ways to reduce this burden on middle-aged women, who are the main caregivers in Japanese society. Finally, I conclude with a discussion of the limitations of my study and suggestions for future research.

# Why Did the Elderly Japanese Population Explode?

### The Decline in Fertility

Japan had a steep fertility decline after the baby boom faded out in the early 1950s (Figure 1). In 1947, the Total Fertility Rate (TFR), the number of lifetime births per woman if the age-specific birth rates did not change, was very high (TFR =4.54). Ten years later, the TFR was at the zero population growth (ZPG) level (TFR=2.11). However, it declined further in the Fire Horse Year in 1966 (Ishikawa, 1997) because girls born then are thought to have unpleasant personalities that make them unmarriageble. To avoid such an ill omen, many Japanese people avoided childbirth during the Fire Horse Year. In 2003, the TFR reached 1.345. Japan now has one of the lowest TFRs in the world.

A basic reason for the fertility decline in the last quarter of the twentieth century was the rise in the age at first marriage for both men and women. In 1950, the average age of first marriage was 25.9 years for men and 23 years for women. Fifty years later, the average age of first marriage became 28.8 years for men and 27 years for women (Figure 2; Retherford, Ogawa, and Sakamoto, 1999). Births outside of marriage are extremely rare in Japan, as they do not fit the patriarchal and patrilocal family system. Therefore, women who marry later will be even older when they become first-time mothers. The Mean Length of Generation (MLG)<sup>1</sup>

equals 29 years based on 2000 Census data. It indicates that it now takes 29 years for a generation of Japanese women to replace themselves with daughters. Since women's fecundity begins to decline in their early thirties, it becomes harder to bear higher-order births (National Institute of Population and Social Security Research, 1998; Iwama, 1998). The declining fertility means that the proportion of children in the population shrinks, while the proportion of older adults rises accordingly.

There are several reasons why younger generations have been postponing marriage and having fewer children during the past generation. The first reason is the economic recession, ongoing for over 10 years in Japan, which discourages young people to marry and moderately encourages young people to stay with their parents. Yamada (1997) points out that about 10 million young people ages 20 to 34 are living with their parents in Japan. Table 1 indicates that 67.2 % of single people ages 20 to 34 are living with their parents. Among them, 91.4 percent answered that they do not do housework and among them 86.4 % answered that they live with their parents because they want to or need to be dependent on their parents (Annual Life Style White Paper 2003).

Analyzing national level longitudinal data called *Shohisya ni kansuru Panel Chousa* (The Study of Household Economy), Kitamura and Sakamoto (2003) found that the basic cost of living (food expense, housing expense, and utilities) of the single people who do not live with parents is significantly higher than that of the single people who live with parents. On the other hand, the expenditure for the

leisure and hobbies of the single people who live with their parents is significantly higher than that of single people who do not live with their parents (Kitamura and Sakamoto, 2003). Further investigation and careful analysis is needed for the study of single people who live with parents as it is relatively new area of study reflecting social class issue, but it is possible to assume that increasing proportions of single people are dependent on their relatively affluent parents (Miyamoto, Iwaue, Yamada. 1997; Kato, 2001; Kitamura and Sakamoto, 2003). People who are in their 20s or 30s are likely to have parents born in the 1940s - 1950s and married in the 1960s -1970s. They benefited from an era of high economic growth when they were at the age their children are now. People, mostly men, were more likely to climb to the head of the section in their companies than those in this current era of economic recession, and most women became housewives, investing their time and love in their children. In fact, the word "housewife" was born after the Second World War and became widely used during the economic expansion (Annual Life Style White Paper, 1995). The young who grew up in such an environment are less likely to feel the needs and pressure to become independent and to support their family financially (Yamada, 1999: Miyamoto, Iwaue, and Yamada 1997; Kato, 2001).

These young people, who live with their relatively affluent middle-aged parents, do not take care of their parents, and their parents also do not see their children as their source of financial and social security in old age (Retherford, Ogawa, and Sakamoto, 1999; Ogawa and Retherford, 1997). Instead, their parents

provide them with food, laundry, and cleaning. Deeply rooted in Japanese culture is the obligation of parents to care for their children when the offspring are young (on), and the young, out of filial piety, to care for the elderly in return (kou) (Yokoyama, 1997; Hashimoto, 2000; Campbell and Ingresoll-Dyton, 2000). This tradition translates into wealth flows from parents to children until children complete their schooling (on), and wealth flows from children to parents when parents become old (kou). This cultural phenomenon has been very true for Baby Boomers and the generations that preceded them. Different from the United States, it is culturally acceptable for young adult offspring to remain in the home of their parents until marriage. However it is difficult to predict when these young people will return their kou to their parents, and whether or not these parents will request it when they become old and start to worry about the ticking of their biological clock.

Another reason for young women's rising age at marriage is their tendency to regard marriage as their opportunity to climb up the social ladder (Yamada, 1996). They want to marry someone who will upgrade their life style, a goal that most parents of daughters share. When most marriages were arranged by the parents of the groom and bride (and this was true until the 1960s), the search for an appropriate spouse was shorter – and ages at first marriage were younger for both sexes – than what is true today (Figure 2). Now, due to the current long economic recession in Japan, it is very difficult for women to find men who can give them a more affluent lifestyle than that which they have with their parents (Yamada, 1996). As a result,



young women nowadays are postponing their age at first marriage (Figure 2) and thus the ages at their births, with the result that period fertility rates have become the lowest in national history (Figure 1).

Another reason for both postponements is that the role of the young Japanese wife within the patriarchal family requires her to withdraw from the labor force after marriage (Lee and Hirata, 2001). Compared with the United States, the association between Japanese women's labor market participation after marriage and women's higher educational attainment is weak (Ogasawara, 2001). Women who wish to remain in the labor force find it very hard to have children because the country has such a poor childcare support system. Not only does Japan lack child care facilities. but mothers there lack the support of men (Nishioka, 1997). In Japan, fathers, as compared with mothers, are far less likely to engage in raising children. Many women fear the prospect of taking on the entire burden of child rearing (Ishikawa, 1997; National Institute of Population and Social Security Research, 2003). Especially for women who live in a nuclear family, 2 it is difficult for them to ask for help from their parents, parents-in-law, or siblings. Also, the patriarchal family system assigns to the eldest son's wife the duty of rendering hands-on care to his parents in their old age; and he provides her with little assistance. A decline in the TFR after the 1940s has meant an increasing percentage of sons are the eldest or the only son. Caring for their dependent children (on) and their dependent parents-in-laws (kou) at the same time has created a double burden for the middle-aged wife and likely caused younger wives to decide in favor of having fewer children.

#### The Decline in Mortality

As is the case for the United States, advances in medical science and technology have caused a decline in mortality in Japan, even among the elderly. This decline has been steeper in Japan than in the United States, such that the life expectancy at birth is now four years longer in Japan (81 versus 77 years) (Population Reference Bureau 2003; Figure 3; Bass, 1996). These differences mean that Japan is aging more rapidly than the U.S., and the need for public, familial, and personal services for the elderly are more pressing than in the U.S.

The decline in Japanese mortality after World War Two was due to a shift from infectious respiratory diseases (for example, tuberculosis, pneumonia, and bronchitis) as the underlying causes of death to the chronic endogenous diseases which kill mainly the elderly (Martin 1989). According to the Ministry of Health, Labor, and Welfare (2003), the top six causes in numbers of death in 2000 were in order: malignant neoplasm (cancer), cardiovascular disease, cerebrovascular disease, inflammation of the lungs, casualty (accidents), and suicide. Figure 4 shows the death rates from these causes by age. Obviously, death from cancer increases outstandingly from around age 40, and peaks at around age 85. Deaths from cardiovascular disease, cerebrovascular disease, and inflammation of the lungs start

to increase gradually from age 60 and reach their maximum around age 85 (Figure 4). Of these six causes of death, suicide has the lowest rate among persons aged 65 or more.

These patterns are different for persons younger than age 65 (Figure 5). Figure 5 shows major causes of deaths (cancer, casualty, and suicide) for people aged 10 – 64 in 2000. For the age groups 15 to 19 and 20 to 24, the highest death rate was due to casualty; and the second highest, from suicide (Figure 5). For the age groups 25 to 29 and 30 to 34, suicide climbed up to the first place. For the age groups 35 to 39, 40 to 44, and 45 to 49, cancer produced the highest death rate. Nevertheless suicide was still highly prevalent, and the rate of suicide reached its peak in age group 55 to 59.

Since medical diagnoses compete to be the underlying cause of death within certain age groups and by sex, I ran a multiple decrement life table for the top six causes of death in Japan in 2000 (Table 2; See Smith 1992, Chapter 5 for the theoretical basis.) Conditional life expectancy indicates the life expectancy at birth for people who will eventually succumb to one of the six underlying causes of death. Cause-eliminated life expectancy indicates the life expectancy of those who will eventually succumb to any of the remaining five underlying causes of death if a given cause is eliminated. For example, the life expectancy at birth for people who will someday die from cancer is 75.59 years for men, and 79.22 years for women, shorter than the life expectancy at birth for males and females if no one could die of

cancer (respectively, 83.25 years and 89.47 years). Therefore, reducing cancer fatalities would increase life expectancy at birth significantly.

As I mentioned above, cancer kills especially middle-aged-to-elderly people, but the age profile of death from suicides and accidents is much younger (Table 2). People who will commit suicide have a life expectancy at birth of 55.18 for males and 62.84 for females. If suicide were eliminated as a cause of death, both sexes would gain about two dozen more years of life expectancy at birth. This is the largest gain that would come from the eradication of any of the top six causes for death, since suicide victims die at the youngest average age (Table 2). Indeed, the elimination of suicide would push the life expectancy at birth beyond its current all-cause level: from 78.13 to 79.20 years for men and from 85.71 to 86.57 years for women.

If cardiovascular disease, cerebrovascular disease, and inflammation of the lungs, were eliminated as underlying causes of deaths, both males and females will live a shorter life than implied by their conditional life expectancy at birth (Table 2). The reason is that deaths rates from these three causes peak at ages above 80 (Martin, 1989). Thus, to be unable to die from one of these three causes would require Japanese people to face higher death risks from causes with younger profiles (cancer, casualty, or suicide). Having these causes as the second, the third, and the fourth most numerous ones are reasons why Japan has a longer life expectancy at birth today than does the United States. And that is why the problem of eldercare is more

pressing in Japan.

## Will the Elderly Boom Continue?

I used data from National Institute of Population and Social Security Research and the Cohort Component Method II (Smith, Tayman and Swanson, 2001, p150) to project the Japanese population to 2010. I conducted two 5-year population projections (2000 – 2005 and 2005 – 2010) and a 10-year population projection (2000 - 2010), and I took the average of the two results for 2010. (See results in Table 3).

More than one fifth (20.2%) of the Japanese male population and more than one fourth (25.2 %) of the Japanese female population will be above 65 years old in 2010. There is approximately a five-percent-difference between males and females, which is probably due to the longer life expectancy of females. Approximately 23% of the total Japanese population will be above 65 years old in 2010. This represents a rise from the 19% found in 2003 (Population Reference Bureau, 2003).

The Ministry of Public Management, Home Affairs, Posts and Telecommunications announced that as of September 15, 2003, Respect-For-Senior-Citizens-Day, 19.0% of the total Japanese population, 24.31 million people (10.26 million males, 14.05 million females), were above 65 years old, marking a record-high. It is now clear that the Elderly Boom will continue

through the first decade of the twenty-first century. In fact, by 2050, people ages 65 and older (parents, grandparents, and great grandparents) will account for 32 % of the population (National Institute of Population and Social Security Research, 2000). This will present a special challenge to younger generations in caring for older generations if the current patriarchal and patrilocal Japanese family system is to be sustained. To understand what that will require, I shall now analyze the current mode of eldercare.

### What Are the Current Patterns of Eldercare?

In the ideal Japanese stem family, the eldest son brings his bride into the home of his parents. She becomes not only his wife, but also becomes the "family wife" who takes care of his parents, as well as him and their children (Knight and Traphagan, 2003; Koskiaho, 1995; Izuhara, 1999; Campbell and Igresoll-Dayton, 2000; Hashimoto, 2000; Hashimoto, 1996; Kasuga, 2002; Ochiai, 1997). If there is no son, ideally the eldest daughter may bring her husband into her father's house, asking the groom to change his last name to that of her father. Also, family and religion are deeply connected and continued through ancestor worship (Smith, 2000). The succession of the tomb <sup>3</sup> is a very important part of ancestor worship. With traditional tombs, in most cases, the eldest son's family, living with his parents, has the right and duty to maintain his ancestors' tomb with *ie* (Makimura 1996). *Ie* is the

concept of a traditional Japanese family deeply related to the *ie* system<sup>4</sup>. Even though the *ie* system was abolished after the Second World War, the deeply rooted custom of *ie* and the law, such as the eldest son's <sup>5</sup> priority of inheriting *ie* and the tomb, has not changed.

Intergenerational ties through the eldest son and his family are extremely important in Japan (Knight and Traphagan, 2003). However, with the rise in married couples with fewer than three children, a rising percentage of couples have no son to fulfill this ideal arrangement for family care (and eldercare) (Martin and Tsuya, 1991; Brown, 2003). The number of highly educated women has increased since the Second World War, and more Japanese women are trying to reduce their low status and heavy responsibility as a "family wife" (Knight and Traphagan, 2003; Koskiaho, 1995; Kasuga, 2002; Izuhara, 1999; Knight and Traphagan, 2003). Issues of elder care often reflect this tension between female empowerment and the ideal Japanese stem family.

Using logistic regression analysis, I investigate what kinds of middle-aged married couples are likely to live with the husband's parents. If the Japanese stem family still strongly exists in Japan, couples in which the husband is a first-born son or for whom the family income makes them affluent should be more likely to carry out this ideal living arrangement. More highly educated respondents would have lower odds of coresidence with the husband's parents, if high education causes the husband to migrate to job opportunities or the wife to resist living with her in-laws

(Martin and Tsuya, 1991).

After a half century of demographic pressure for eldercare created by fertility decline, what are the current arrangements? To what extent are the eldest son and his "family wife" still able to fulfill the cultural imperative of caring for his parents? To answer this question, I analyzed the 1990 Japanese Survey on Elderly Care<sup>6</sup>, conducted on men and women, who had at least one parent or parent-in-law still alive.

The survey was conducted by the Japan Institute of Life Insurance. Questionnaires were left for self-administration with 4,000 male and female respondents between 40 and 64 years of age with at least one parent or parent-in-law still alive. They were selected by stratified two-stage random sampling. After a certain period of time, researchers picked up the questionnaires from the respondents' residences. They gained 2,366 effective responses, a completion rate of 59%. While this data set is now 14-years-old, it is the most recent available national survey that can reveal contemporary patterns of eldercare by families in Japan.

I carried out a multivariate logistic regression in which the dependent variable is living arrangement (0= other living arrangements, 1= living with husband's parents). The independent variables are measured as follows: (1) Education of the respondent <sup>7</sup> (1=junior high school or less, 2= high school, 3= junior college, 4= four-year-college and graduate school); (2) Family income (measured as an ordinal variable); (3) Sex of the respondent (0 = female, 1=male); (4) Birth order of husband

and wife (1=both are eldest, 2=he only is the eldest, 3= she only is the eldest, 4= neither of them is the eldest); (5) Age of respondent (in single years).

As expected, birth order is the strongest predictor of whether respondents live with a man's parents or not (Table 4). Controlling for other variables, if both husband and wife are first-born (eldest child), the odds of living with his parents are 4.765 times as large as those of a couple where neither the husband nor the wife is first born (omitted category). If the husband only is the first-born child, then the odds of living with his parents become 5.941 times as large as those of a couple where neither the husband nor the wife is first-born. The higher the education level of the respondents, the lower the odds of living with the husband's parents. As Martin and Tsuya (1991) point out, "it might be expected that those with less education would be less exposed to modern ideas, would subscribe to more traditional practices, and might be likely to co-reside with parents" (p304).

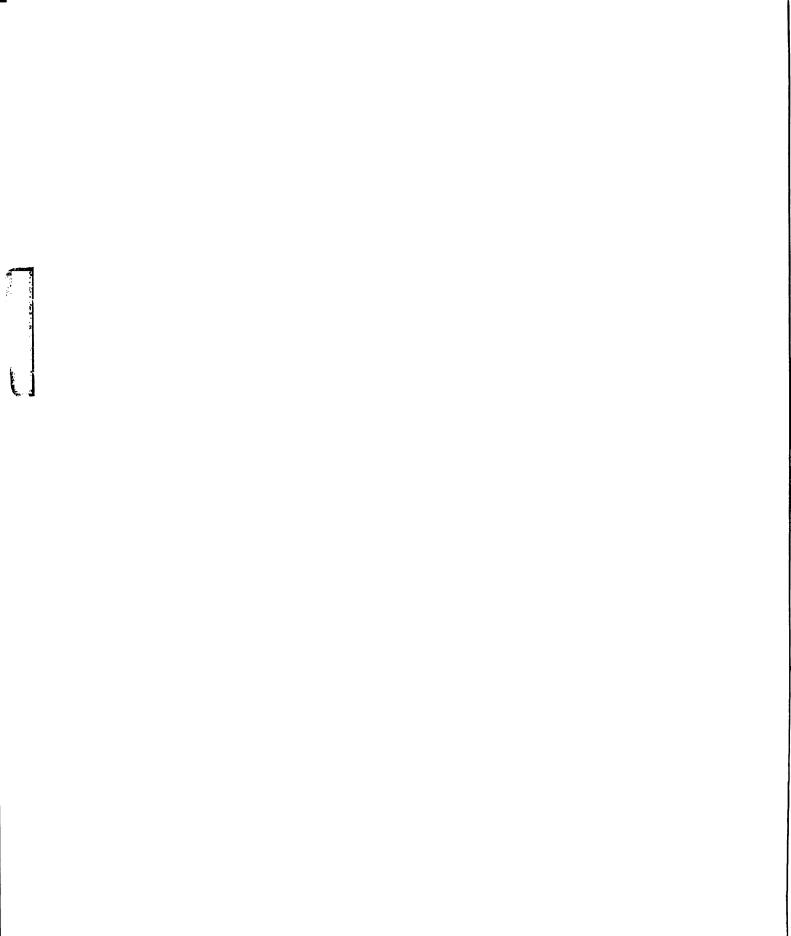
Controlling for other variables, age has a significant effect on living arrangement. Every year of age that the respondent is older reduces the odds of living with the husband's parents by about 3 percent (Table 4). The older the respondents, the more likely they are to have deceased parents.

The higher the family income, the greater the likelihood that people will live with the husband's parents. This is probably because, if a husband can contribute sufficient money to the family income, (1) a couple can afford to take care of the elderly at home by maintaining, buying, or remodeling residences to accommodate

their seniors, and (2) a wife is more likely to be asked to stay home to take care of the elderly and the children.

Apparently, the ideal stem family system still exists in Japan, and the eldest son and his wife do typically live with his parents and take care of them. However, we caution that this survey was conducted in 1990. During the 1990s, owing to the evolution of social welfare programs called "the Gold Plan (the Golden Plan)" in Japan, there was a transition from exclusively private family care for the elderly to the increased use of public, professional, paid Japanese caregivers at societal level (Jenike, 2003). A Japanese couple gained an option to hire public or private caregivers at home. Jenike (2003) asserts that, at the individual level, it is a traumatic process for a caregiver to relinquish her obligation of total care of her parents-in-law to outsiders, but women born and educated after the end of World War Two experience fewer moral dilemmas. However, his study is based on qualitative data focused on urban areas, and cannot be generalized to the national level. In fact, the Citizen's Basic Living Survey (Kokumin seikatsu kiso chosa) 2001 reported that the main caregiver was a family member who was living with the care recipient (71.1%). Among caregivers, 76.4 % were women. Still, there is a strong tension and ambivalence to shift from private to public care, and women in the household are still considered as main caregivers in Japan.

Ogawa and Retherford (1997) see "the Golden Plan" rather critically. They find that it is a government attempt to shift costs back to families due to the steep



rising burden of taxes plus social security contributions. They assert that "the main thrust of the Golden Plan is to improve services for the elderly who live at home, by strengthening three types of services: home-helpers, short-term-stay facilities, and day-care centers" (Ogawa and Retherford, 1997, p70). Behind this plan, we can see "the Japanese government views the persistence of coresident households as a unique asset that can be tapped to offset the adverse effects of population aging" (Ogawa and Retherford, 1997, p76). Also, they point out that demand for Golden Plan services is expected to keep ahead of the supply. Thus, the burden is still left on the middle aged wives who are waiting for their turn to receive services for the elderly at home.

Jenike (2003) made a good point that, about twenty years ago, becoming a daughter-in-law meant ten to twenty years of servitude to their parents-in-law. Now, due to the rising life expectancy, many daughters-in-law need to spend more than a couple of decades as caregivers to their parents-in-law. That is certainly a reason why many young single women now hesitate to become a "family wife" by marrying an eldest son.

# How to Ease the Demands on a Middle Aged Wife as A Caregiver?

An increase in the percentage of elderly Japanese who are committed to the Japanese patriarchal family system culturally pressures middle-aged wives to care

for them. But at the same time, the government policies have not eased the burden. Hashimoto (1996) made an intriguing comparison between public policies for the elderly in Japan and the United States. She asserts that the subject of the Law for the Welfare of the Aged in Japan refers "responsibility" for care of the elderly to state institutions reflecting a norm of filial care for the elderly, whereas the subject of the Older Americans Act in the United States frames the "rights" of the elderly to be independent. This is a reflection of the American ideology of freedom and equal opportunity. Hashimoto (1996) also compares the concepts of social security in both nations. She explains that Japanese prefer a "protective" approach focused on care provided by children because it promotes a sense of certainty. Americans equate security with the ability to maintain autonomy and choose from multiple options" (Hashimoto, cited in Campbell and Ingersoll-Dayton, 2000, p.232). Hye Kyung Lee (cited in Hashimoto, 1996) calls Japanese public policies a paternalistic ideology, and U.S. policies an individualistic ideology. Yokoyama (1997) agrees with their points, and asserts that autonomy for the elderly is more highly valued in the U.S. than in Japan. As a rule, people do not require the elderly to be independent in Japan because the Japanese government and its public policies such as Golden Plan rely on families to take care of the elderly as their cultural norm of filial piety (Ogawa and Retherford, 1993; Ogawa and Retherford, 1997; Izuhara, 1999; Koskiaho, 1995). Even the new Civil Code still declares that children are legally responsible for taking care of their elderly parents although other more developed nations have abolished legal requirements for providing care for their elder parents (Ogawa and Rethreford, 1997). Ogawa and Retherford (1997) point out that there were 112 court cases relating to inadequate provision of support for elderly persons in 1995.

To ease the demands on a middle-aged wife's time and unpaid labor that are created by her multiple family responsibilities to her husband, her child(ren), and the ballooning number of her husband's surviving parents and grandparents, I now shall propose a series of solutions. My first proposal is to establish a better local community for the elderly. If the elderly who are living in the same community can help each other, it will reduce the burden on middle-aged women. One good example is Shimada City, where I grew up. The elderly form a group, and play Japanese croquet once or twice a week. They not only practice croquet, but also talk about themselves and listen to their friends' problems. They form teams and plan several croquet tournaments a year. There are also volunteer groups consisting of retired people, housewives, and healthy elderly people. They are supported by the city government. They cook meals, clean house, and read newspapers for the elderly. They visit their houses to communicate with them, and sometimes take them to a small concert or a park. If people living in the same city volunteer to assist the elderly and if the city government can effectively use their time and labor, it will alleviate the caregiving burden on middle-aged women, and strengthen the local community and its city government. City governments of Japan should also encourage and assist families to learn and to use public services and facilities for the

elderly.

My second proposal is to boost the number of caregivers to seniors by reducing mortality from casualty, suicide, and cancers as much as possible. These causes of death strike young and middle-aged adults most heavily.

There is so much room for the development of new technologies to prevent and treat cancer. The National Cancer Center (2003) is leading the way through its studies of cigarette consumption, as funded by the Government of Japan. Table 5 indicates Japanese people's tobacco consumption in detail. There is a great gap in the percentage of Japanese men and women who smoke. There is social pressure for women not to smoke. Even though the percentage of male smokers has decreased gradually, they are smoking more heavily than women. A majority of men smoked in 2000. They are probably the bulk of customers of the tobacco industry, as well as the bulk of cancer patients and cancer deaths up to now.

Another interesting finding related to smoking and health is that, for men, smoking contributes to the risk of laryngeal cancer (95.8 percent), lung cancer (71.5 percent), diseases of peripheral vessels (64.7 percent), aneurysm (50 percent), esophageal cancer (47.8 percent), pulmonary emphysema and bronchiectasia (47.8 percent), gastric ulcer (39.2 percent), subarachnoidal hemorrhage (38.2 percent), ischemic heart diseases (35.5 percent), liver cancer (28.3 percent), pancreatic cancer (28.3 percent), and stomach cancer (25.1 percent) (National Cancer Center, 2003). They also have estimated the population attributable risk of passive smoking to the

mortality of smoker's wives: brain tumor (69.5 percent), maxillary sinus (36.2 percent), lung cancer (31percent), ischemic heart diseases (11.6 percent), total diseases (11.1 percent), cancer all sites (9.9 percent) (National Cancer Center, 2003). These statistics suggest that smoking cessation may be the easiest way for adults and the elderly, men as well as women, to avoid cancer, and to live healthy and active lives that include care for their senior relatives.

The reduction of suicide holds another important key. As I mentioned above, people who are in their 20s to 50s are at the prime risk of committing suicide, which significantly erodes the family's base of support to the elderly. Ways must be found to manage the stress suffered by middle-aged men and women,

Job stress is a more pervasive problem in Japan than in the United States. In the United States, there are businessmen and businesswomen who work intensively in order to climb up their social ladder. Usui (2003) points out that, in the United States, people are more likely to have clear objectives and its society emphasizes meritocracy over the seniority system. In Japan, there is a saying "the nail that sticks out gets banged down". Seniority system is emphasized over the meritocracy. When co-workers ask him to do something, a typical businessman will not refuse, although he feels very stressed due to overwork (Ono, 2001). Their highly intensive work-oriented attitude, dedication to their companies, and sacrifice of their personal objectives and feelings creates a disease called "karoshi," which means death from overwork and "karo-jisatsu," which means suicide due to overwork. Japan is

experiencing a long economic recession, which creates another stress and fear as well as strong motivation to overwork for their companies because they do not want to get fired. These could be the reasons to explain high middle aged and older men's mortality by suicide. How to treat middle aged and older men as well as the young in the work place may be a solution to keep the base population stable and to keep the next generation of elderly healthy.

Even though Japan is in a lingering recession, it is important for the Japanese government to provide the population with jobs. However, it is possible to imagine that the economic recession may provide time to slow down these workaholic baby boomers and their younger followers because karoshi and karo-jisatsu are serious problems in Japan. Providing jobs and slowing down the pace of intensive working hours may be effective solutions to reduce the number of karoshi and karo-jisatsu. Instead of just forcing workers to slow down, the government or media should guide them to find other interests. Taking classes at university, learning something new at culture centers, volunteering to teach their skills, and/or finding hobbies are good examples. Also, it is important to change the stereotypical perception towards psychiatric consultation. Especially old people tend to think that psychiatric consultation is for someone who is abnormal (Kawahito, 1998). Keeping a healthy balance between letting people work and letting people have a life other than work may be the solution to keep the base population healthy to support the elderly and keep future elderly generations healthy. That will reduce the burden on middle aged women because the elderly can help taking care of their grandchildren at home, which will save time and labor on women, especially women who are trying to establish their career. If this proposal works effectively, it will also reduce the anxiety on their followers to marry and to have a child.

The third proposal I have is to change the patriarchal government system. If Japan can effectively promote healthy aging and establish good local communities for the elderly, that will also reduce the number of the elderly who are dependent only on their families, especially their daughter-in-law. At the same time, in order to promote my first two proposals effectively, the government and its public policies need to support the autonomy for the elderly and women. It may be challenging as it is related to the cultural norm of filial piety, but being 65 years old is now not considered to be old in Japan, and its government policies scare away single women to marry and to live with them. It is extremely important for the government to change its perception that middle-aged wives as only caregivers and the elderly as being dependent on families.

# Conclusion: Japanese Population: Past, Present, and Future

If the TFR continues to decrease in Japan or to remain at 1.345 (below the replacement level), then at least half of married couples will not have a son to live with them in their old age and their daughter will find it difficult to find a husband for them to adopt. If Japan remains as it is, Japanese wives are the ones who are

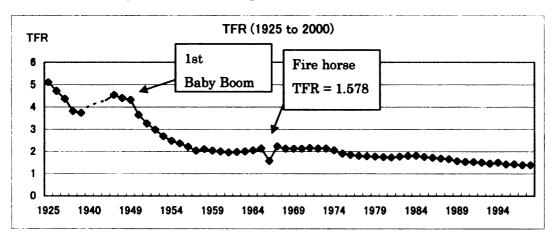
going to suffer the most, carrying the extremely heavy burden of caring for both sets of elderly parents as well as their own child (Kasuga, 2002; Koskiaho, 1995; Izuhara, 1999). If they try to have careers, their burden will be heaviest. It is possible to predict that educated women who have a career will avoid making such a heavy commitment to care for their parents, parents-in-law, and children at the same time. In this long economic recession, it is extremely difficult for men to support their families financially as well as to provide eldercare and childcare. Therefore, women are more likely to resist getting married and having children. These trends will promote the future explosion of elderly Japanese, many of whom will have no children from whom to receive *kou*.

This study has several limitations. The 1990 survey on elder care needs to be updated, and I could not distinguish the situations of rural and urban families. Japanese society has been experiencing dynamic changes in multidimensional spheres, but the rural family may be experiencing extra hardships in preserving the patriarchal, patrilocal, and primogenitural family (Tsutumi, 1999). For the future study, it is important to update a survey of the elderly as well as to add the variable "rural/urban" in order to capture the contextual effects on aging.

Ogawa and Retherford (1997:64) point out that, "After 2007, Japan's development will enter uncharted territory and must look to its own policy creativity rather than the experience of other countries in dealing with the economic and social problems posed by the unprecedented aging of its population." One of the

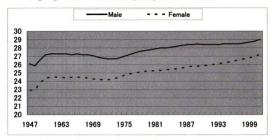
respondents of a survey of elderly care commented that his wife lost 26 pounds due to heavy elder care, so they decided to send his father to a nursing home. At his father's funeral, some neighbors or relatives criticized his family. They said, "It is pitiful for his parents to die at the nursing home" (Japan Institute of Life Insurance, 1991, p187). Apparently, elderly care is going to be the most difficult problem to tackle in Japan, and it is becoming extremely important for its government to change its patriarchal perception and to promote healthy and independent elderly supported by strong local communities.

Figure 1
Total Fertility Rate (TFR), Japan 1925 to 2000



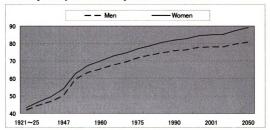
Source: National Institute of Population and Social Security Research

Figure 2
Average Age of the First Marriage, Japan 1947 to 2001



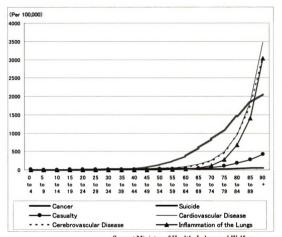
Source: National Institute of Population and Social Security Research

Figure 3 Life Expectancy at Birth for Japanese Men and Women



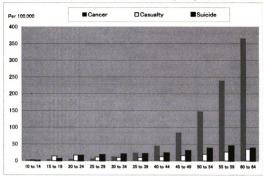
Source: National Institute of Population and Social Security Research

Figure 4
Top Six Causes of Deaths, Japan 2000



Source: Ministry of Health, Labor, and Welfare

Figure 5
Cancer, Casualty, and Suicide for Selected Age: Japan, 2000



Source: Ministry of Health, Labor, and Welfare

Table 1
Marital Status and the Living Styles of Young People (Age 20 to 34):
Japan

		The number			
		of	The number of the	Percentage of the	
	Young People		young living with	young living with	
			parents	parents	
			(10,000)	(%)	
		(10,000)			
Total		2,699	1,308	48.5	
Never Married Single		1,672	1,124	67.2	
	Men	935	589	63.0	
	Women	737	534	72.5	
Married men and		976	164	16.8	
women					

Source: Annual Life Style White Paper 2003, Cabinet Office of Japan

Table 2
Life Expectancy at Births for the Top 6 Causes of Death (Based on 2000 Multiple Decrement Life Table): Japan

	Men (y	vears)	Women (years)	
	Conditional	Cause	Conditional	Cause
		eliminated		eliminated
Cancer	75.59	83.25	79.22	89.47
Cardiovascular Disease	80.07	80.13	88.38	87.60
Cerebrovascular Disease	81.40	79.89	88.16	87.52
Inflammation of the lungs	85.50	79.37	90.65	86.82
Casualty	68.50	79.28	80.31	86.64
Suicide	55.18	79.20	62.84	86.57

Source: Multiple decrement life tables for men and women 2000

Table 3
Population Projection to 2010: Japan

Male			Female				
	10 year	5 year projection	Average		10 year	5 year projection	Average
0 to 9	5,834,678	5,823,276	5,828,977	0 to 9	5,517,158	5,504,592	5,510,875
10 to 14	3,054,833	3,046,415	3,050,624	10 to 14	2,911,827	2,902,905	2,907,366
15 to 19	3,095,358	3,094,003	3,094,681	15 to 19	2,947,086	2,944,763	2,945,925
20 to 24	3,309,308	3,301,656	3,305,482	20 to 24	3,161,983	3,153,194	3,157,589
25 to 29	3,720,961	3,711,242	3,716,102	25 to 29	3,610,496	3,582,723	3,596,610
30 to 34	4,279,084	4,229,208	4,254,146	30 to 34	4,122,634	4,093,868	4,108,251
35 to 39	4,988,038	4,926,414	4,957,226	35 to 39	4,858,915	4,837,414	4,848,165
40 to 44	4,437,795	4,393,730	4,415,763	40 to 44	4,358,606	4,347,480	4,353,043
45 to 49	4,049,180	4,021,432	4,035,306	45 to 49	3,995,677	3,993,948	3,994,813
50 to 54	3,829,937	3,789,864	3,809,901	50 to 54	3,826,525	3,812,558	3,819,542
55 to 59	4,300,090	4,248,387	4,274,239	55 to 59	4,370,018	4,353,602	4,361,810
60 to 64	4,947,130	4,885,535	4,916,333	60 to 64	5,126,317	5,110,437	5,118,377
65 to 69	3,867,240	3,882,925	3,875,083	65 to 69	4,271,851	4,279,690	4,275,771
70 to 74	3,155,665	3,162,960	3,159,313	70 to 74	3,749,787	3,727,742	3,738,765
75 to 79	2,617,849	2,597,764	2,607,807	75 to 79	3,406,889	3,360,421	3,383,655
80 to 84	1,755,157	1,761,795	1,758,476	80 to 84	2,674,919	2,628,642	2,651,781
85 +	1,121,626	1,165,101	1,143,364	85 +	2,964,313	2,887,130	2,925,722
Total	62,363,929	62,041,707	62,202,818	Total	65,875,001	65,521,109	65,698,055

Source: Deaths and Births data come from Ministry of Health, Labor, and Welfare (online). Census data come from National Institute of Population and Social Security Research (online). Life tables were computed by life table software of David Smith.

Table 4
Logistic Regression Analysis of Residence With a Husband's Parents (1=yes), With Five Predicting Variables: Japan, 1990.

	В	S.E.	Wald	df	Exp (B)
Overall birth order			197.580	3	
Both the eldest	1.561***	.170	84.699	1	4.765
He only the eldest	1.782***	.174	104.610	1	5.941
She only the eldest	011	.199	.003	1	.989
Family income	.113*	.052	4.736	1	1.119
Education	223**	.064	12.009	1	.800
Sex	.205	.110	3.461	1	1.227
Age	030***	.009	12.279	1	.971
Constant	377	.481	.616	1	.686

Source: 1990 Japanese Survey on Elder Care, conducted by Japan Institute of Life Insurance.

Table 5
Percentage of Japanese smokers (over 20 years old) by Sex, 1999

Year	Number of cigarettes sold	Number of cigarettes per person (15 years and older)	Percentage of the population (over 20 years old) who smoke	
			Men	Women
1965	173,639	2,350	82.3	15.7
1970	222,745	2,810	77.5	15.6
1975	290,202	3,422	76.2	15.1
1980	303,974	3,393	70.2	14.4
1985	310,700	3,192	64.6	13.7
1990	322,000	3.185	60.5	14.3
1995	334,700	3,170	58.8	15.2
2000	336,600	3,152	55.2	13.3

Source: National Cancer Center Web Site

## **END NOTES**

- Mean Length of Generation (MLG): it is the average age of mothers at the births of their daughters. Definition of MLG is from: Shryock, Henry S., and Jacob S. Siegel. 1971. The Methods and Materials of Demography, Volume 2, p.527. Washington, D.C.: United States Governmental Printing Office.
- The ratio of nuclear family was 59.6 percent in 1995, 63.9% in 1975 (Ochiai, 1997).
- A Japanese tomb consists of a stone inscribed with the family name and a vessel containing the ashes and bones of the deceased. The family name and spirit are carried on by the maintenance of this tomb by the eldest son. If the family has no male heir, the name and the maintenance of the tomb are inherited by a daughter. When she is married, her family adopts her husband who then takes her family name and carries on her name, line, and maintenance of the tomb
- The *ie* was legislated as a system for governing the nation, and standardized through school education in the Meiji period, although it had existed even before then. It was abolished as the legal system when the Civil Law was amended in the postwar, but the *ie* remained in farm households, where it was permitted as an exception to limit the inheritance of assets to the farm's successor" (Takahashi, 2000, p55). It is possible to say that its custom still exists in Japan in rural areas as well as urban areas.
- In Japan, a son and heir, even if he is an "only child", is referred to as The eldest Son. Because there are fewer eldest sons, it is increasingly more difficult to succeed *ie* and the tomb.
- I borrowed the survey data (the Japanese Survey on Elderly Care) through the Information Center for Social Science Research on Japan, Institute of Social Science, the University of Tokyo (SSJ Data Archive). The University Committee on Research Involving Human Subjects (UCRIHS) approved this project (IRB# 04-323).
- If the respondents dropped out from the school, they were asked to circle the institution they belonged to when they dropped out.
- The Gold Plan (The Golden Plan): The New Golden Plan has started since 1994. It is a revised version of the previous Gold Plan (the Golden Plan). The previous Gold Plan was the 1989 ten-year strategic social welfare plan for the elderly. The difference between them is that "the New Gold Plan promoted home care support services over long-term institutionalization" (Jenike, 2003, p180).
- <sup>9</sup> "Current laws require employers to send their organizations' retirement age at 60 or over. But employers are obliged only to try and continue employing workers until they are 65. Minisry figures show that 89.2 percent of companies have a retirement age of 60, which only 28.8 percent will continue employing workers after they have reached retirement until they are 65" (Mainichi Shinbun, October 22, 2003, posted on Global Action on Aging Web Site).

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